

RESULT 2

US-10-401-916-14

Qy 241 GRCLLSLQRVVLGLPGIIRCVSRGVV 268

Db 241 GRCLLSLQRVVLGLPGIIRCVSRGVV 268

Organism: Homo sapiens

Query Match 54.2%; Score 783; DB 14; Length 218;

Best Local Similarity 96.8%; Prd. No. 7.1e-69;

Matches 155; Conservative 5; Indels 0; Gaps 0;

Qy 1 MGRLLALVGALVSACGGCDEVDEAVYGMTRKLCISKRSERSETNAETFTETWTR 60

Db 1 MGRLLALVGALVSACGGCDEVDEAVYGMTRKLCISKRSERSETNAETFTETWTR 60

Qy 61 QKGTEEFVKILRYENEVQLEEDERFEGRVWNGSRGTRKDQLSIFITNVYTNHSGDYE 120

Db 61 QKGTEEFVKILRYENEVQLEEDERFEGRVWNGSRGTRKDQLSIFITNVYTNHSGDYE 120

Qy 121 CHYRLLFFENYEHNTSVVKKIHIEVVDKGESGAA 155

Db 121 CHYRLLFFENYEHNTSVVKKIHIEVVDKGESGAA 155

RESULT 4

US-09-937-579-44

Sequence 44, Application US/09997579

Patent No. US2002113203A1

GENERAL INFORMATION:

APPLICANT: Cambridge University Technical Services

TITLE OF INVENTION: A novel family of beta sub-unit proteins from a voltage gated sodium channel

TYPE: PRT

ORGANISM: Homo sapiens

SEQ ID NO: 14

LENGTH: 268

CURRENT FILING DATE: 2003-03-28

PRIOR FILING DATE: 2001-09-10

NUMBER OF SEQ ID NOS: 14

PRIOR APPLICATION NUMBER: US/10/401,916

CURRENT APPLICATION NUMBER: US/09/875,456A

PRIOR APPLICATION NUMBER: US/09/875,456A

NUMBER OF SEQ ID NOS: 14

PRIOR FILING DATE: 2001-09-10

NUMBER OF SEQ ID NOS: 14

PRIOR APPLICATION NUMBER: US/10/401,916-14

TYPE: PRT

ORGANISM: Homo sapiens

SEQ ID NO: 14

LENGTH: 268

Query Match 100.0%; Score 1444; DB 15; Length 268;

Best Local Similarity 100.0%; Pred. No. 4.6e-14;

Matches 268; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MGRLLALVGALVSACGGCDEVDEAVYGMTRKLCISKRSERSETNAETFTETWTR 60

Db 1 MGRLLALVGALVSACGGCDEVDEAVYGMTRKLCISKRSERSETNAETFTETWTR 60

Qy 61 QKGTEEFVKILRYENEVQLEEDERFEGRVWNGSRGTRKDQLSIFITNVYTNHSGDYE 120

Db 61 QKGTEEFVKILRYENEVQLEEDERFEGRVWNGSRGTRKDQLSIFITNVYTNHSGDYE 120

Qy 121 CHYRLLFFENYEHNTSVVKKIHIEVVDKGESGAACPFTVTHRRARWRDWOAVDRTGML 180

Db 121 CHYRLLFFENYEHNTSVVKKIHIEVVDKGESGAACPFTVTHRRARWRDWOAVDRTGML 180

Qy 181 CAWPANPQORAEGEQSSPSCPQLMPLFSSPRGQSPMVPHRSSGYRQLCHLCMMS 240

Db 181 CAWPANPQORAEGEQSSPSCPQLMPLFSSPRGQSPMVPHRSSGYRQLCHLCMMS 240

Qy 241 GRCLLSLQRVVLGLPGIIRCVSRGVV 268

Db 241 GRCLLSLQRVVLGLPGIIRCVSRGVV 268

RESULT 3

US-10-142-201B-8

Publication No. US2003022205A1

GENERAL INFORMATION:

APPLICANT: Millenium Pharmaceuticals Inc.

APPLICANT: Curtis, Rory A. J.

TITLE OF INVENTION: A SODIUM CHANNEL BETA-4 SUBUNIT,

FILE REFERENCE: MP12001-1061RN(M)

CURRENT FILING DATE: 2002-05-09

PRIOR APPLICATION NUMBER: US 60/289,893

NUMBER OF SEQ ID NOS: 12

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO: 8

TYPE: PRT

Organism: Homo sapiens

Query Match 52.0%; Score 751; DB 9; Length 218;

Best Local Similarity 92.9%; Prd. No. 1e-65;

Matches 144; Conservative 2; Mismatches 9; Indels 0; Gaps 0;

Qy 1 MGRLLALVGALVSACGGCDEVDEAVYGMTRKLCISKRSERSETNAETFTETWTR 60

Db 1 MGRLLALVGALVSACGGCDEVDEAVYGMTRKLCISKRSERSETNAETFTETWTR 60

Qy 61 QKGTEEFVKILRYENEVQLEEDERFEGRVWNGSRGTRKDQLSIFITNVYTNHSGDYE 120

Db 61 QKGTEEFVKILRYENEVQLEEDERFEGRVWNGSRGTRKDQLSIFITNVYTNHSGDYE 120

Qy 121 CHYRLLFFENYEHNTSVVKKIHIEVVDKGESGAA 155

Db 121 CHYRLLFFENYEHNTSVVKKIHIEVVDKGESGAA 155

RESULT 5

US-10-029-191-20

Sequence 20, Application US/10029191

Publication No. US2002160453A1

GENERAL INFORMATION:

APPLICANT: CURTIS, Rory A. J.

TITLE OF INVENTION: NOVEL GENE ENCODING A SODIUM CHANNEL BETA-3 SUBUNIT

FILE REFERENCE: 210147-000X/5U1

CURRENT APPLICATION NUMBER: US/10/029,191

CURRENT FILING DATE: 2001-12-20

PRIOR APPLICATION NUMBER: 09/565,978

NUMBER OF SEQ ID NOS: 12

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO: 8

TYPE: PRT

Db 124 REFEEAHRPFVKTTR1PLRVTEAGE 151

RESULT 9
US-09-997-579-23
; Sequence 23, Application US/09997579
; Patent No. US200213203A1

GENERAL INFORMATION:
TITLE OF INVENTION: A novel family of beta sub-unit proteins from a voltage gated sodium channel

TITLE OF INVENTION: nucleic acids encoding them and therapeutic or diagnostic uses
FILE REFERENCE: 671558-2001

CURRENT FILING DATE: 2002-04-05
PRIOR APPLICATION NUMBER: PCT/EP00/01783

PRIOR FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: 60-129,473

PRIOR FILING DATE: 2000-02-24
NUMBER OF SEQ ID NOS: 47
SOFTWARE: PatentIn version 3.1
SEQ ID NO: 23

TYPE: PRT
ORGANISM: Rat
US-09-997-579-23

Query Match
Best Local Similarity 17.8%; Score 257.5; DB 9; Length 159;
Matches 59; Conservative 19; Mismatches 47; Indels 7; Gaps 4;

Db 26 CVEVDSEPAVGNTMTEKILCISCKRSSTNAETFTWTFRQKGTEBFVKILRYENEVQL 80

Qy 21 CVEVDSEPAVGNTMTEKILCISCKRSSTNAETFTWTFRQKGTEBFVKILRYENEVQL 84

Db 26 CVEVDSEPAVGNTMPEKILCISCKRSSTNAETFTWTFRQKGTEBFVKILRYENEVQL 80

Qy 81 EEDERFEGRVWNGSRGCKDKLQDLSIFTNTVNTYNSDYECHYRLLFFENYEHTNSVVK 140
Db 85 ESDP-FQGRQWNGS--KDLQDVSITVNTLNDGlyTNCNSRFEFEAHRPFVKTTR 139

Qy 141 KIHIEVVDK-GE 151
Db 140 LIPRVTAGE 151

RESULT 10
US-10-029-191-4
; Sequence 4, Application US/10029191
; Publication No. US2002160453A1

GENERAL INFORMATION:
APPLICANT: CURTIS, RORY A.J.

TITLE OF INVENTION: NOVEL GENE ENCODING A SODIUM CHANNEL BETA-3 SUBUNIT
FILE REFERENCE: 210147.00XX/5U1
CURRENT FILING DATE: 2001-12-20
PRIOR APPLICATION NUMBER: 09569,978
PRIOR FILING DATE: 2000-05-12
PRIOR APPLICATION NUMBER: US 60/134,198
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 4
LENGTH: 191
TYPE: PRT
ORGANISM: Rattus sp.
US-10-029-191-4

Query Match
Best Local Similarity 17.8%; Score 257.5; DB 13; Length 191;
Matches 59; Conservative 19; Mismatches 47; Indels 7; Gaps 4;

Db 2 CVEVDSEPAVGNTMTEKILCISCKRSSTNAETFTWTFRQKGTEBFVKILRYENEVQL 80

Qy 81 EEDERFEGRVWNGSRGCKDKLQDLSIFTNTVNTYNSDYECHYRLLFFENYEHTNSVVK 140
Db 61 ESDP-FQGRQWNGS--KDLQDVSITVNTLNDGlyTNCNSRFEFEAHRPFVKTTR 139

Qy 141 KIHIEVVDK-GE 151
Db 140 LIPRVTAGE 151

RESULT 12
US-10-029-191-2
; Sequence 2, Application US/10029191
; Publication No. US2002160453A1

GENERAL INFORMATION:
APPLICANT: CURTIS, RORY A.J.
TITLE OF INVENTION: NOVEL GENE ENCODING A SODIUM CHANNEL BETA-3 SUBUNIT
FILE REFERENCE: 210147.00XX/5U1
CURRENT FILING DATE: 2001-12-20
PRIOR APPLICATION NUMBER: 09569,978
PRIOR FILING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 4
LENGTH: 191
TYPE: PRT
ORGANISM: Rattus sp.
US-10-029-191-4

Query Match
Best Local Similarity 17.8%; Score 257.5; DB 13; Length 191;
Matches 59; Conservative 19; Mismatches 47; Indels 7; Gaps 4;

Db 2 CVEVDSEPAVGNTMTEKILCISCKRSSTNAETFTWTFRQKGTEBFVKILRYENEVQL 80

Qy 81 EEDERFEGRVWNGSRGCKDKLQDLSIFTNTVNTYNSDYECHYRLLFFENYEHTNSVVK 140
Db 61 ESDP-FQGRQWNGS--KDLQDVSITVNTLNDGlyTNCNSRFEFEAHRPFVKTTR 139

Qy 141 KIHIEVVDK-GE 151
Db 140 LIPRVTAGE 151

US-10-029-191-2

Query Match 17.8%; Score 257.5; DB 13; Length 215;
Best Local Similarity 44.7%; Pred. No. 5.8e-17;
Matches 59; Conservative 19; Mismatches 4; Indels 7; Gaps 4;

Qy 21 CVEVDSETAVYGMTEKILCISKRSSETNAETFTETFRQKGTEEFVKILRYENEVLQL 80
Db 26 CVEVPSETAVQGNPMPKURCISKRSKREVEATVVEYRPGGKDL-IYEYRNQEV 84

Qy 81 EEDERFEGRVWNGSRSRGTKDQLDLSIFITNVYNNHSDYECHYVRLIFFENYEHTNSVVK 140
Db 85 ESP -FOGRLQWNGS -- KDLQDVSVITVLNVLNDSGLYTCNSREPEFEAHRPFYKTR 139

Qy 141 KIHIEVDK-GE 151
Db 140 LIPLRVTEPAGE 151

RESULT 13
US-10-142-201B-12
; Sequence 12, Application US/1042201B
; Publication No. US20030022205A1
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals Inc.
; TITLE OF INVENTION: 98359, A SODIUM CHANNEL BETA 4 SUBUNIT,
; TITLE OF INVENTION: AND USE THEREFOR
; FILE REFERENCE: MPT2001-1061PRN(M)
; CURRENT APPLICATION NUMBER: US/10/142, 201B
; CURRENT FILING DATE: 2002-05-09
; PRIOR APPLICATION NUMBER: US 60/289, 893
; PRIOR FILING DATE: 2001-05-09
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 215
; TYPE: PRT
; ORGANISM: Rattus norvegicus

US-10-142-201B-12

Query Match 17.8%; Score 257.5; DB 14; Length 215;
Best Local Similarity 44.7%; Pred. No. 5.8e-17;
Matches 59; Conservative 19; Mismatches 4; Indels 7; Gaps 4;

Qy 21 CVEVDSETAVYGMTEKILCISKRSSETNAETFTETFRQKGTEEFVKILRYENEVLQL 80
Db 26 CVEVPSETAVQGNPMPKURCISKRSKREVEATVVEYRPGGKDL-IYEYRNQEV 84

Qy 81 EEDERFEGRVWNGSRSRGTKDQLDLSIFITNVYNNHSDYECHYVRLIFFENYEHTNSVVK 140
Db 85 ESP -FOGRLQWNGS -- KDLQDVSVITVLNVLNDSGLYTCNSREPEFEAHRPFYKTR 139

Qy 141 KIHIEVDK-GE 151
Db 140 LIPLRVTEPAGE 151

RESULT 14
US-10-029-191-5

Query Match 17.4%; Score 251; DB 13; Length 111;
Best Local Similarity 50.0%; Pred. No. 1.e-16;
Matches 55; Conservative 14; Mismatches 35; Indels 6; Gaps 3;

Qy 21 CVEVDSETAVYGMTEKILCISKRSSETNAETFTETFRQKGTEEFVKILRYENEVLQL 80
Db 2 CVEVPSETAVQGNPMPKURCISKRSKREVEATVVEYRPGGKDFL-IYEYRNQEV 60

Qy 81 EEDERFEGRVWNGSRSRGTKDQLDLSIFITNVYNNHSDYECHYVRLIFFENYEHTNSVVK 130
Db 61 ESP - FQGRLQWNGS -- KDLQDVSVITVLNVLNDSGLYTCNSREFERE 105

RESULT 15
US-10-095-131A-20
; Sequence 20, Application US/10095131A
; Publication No. US20030171565A1
; GENERAL INFORMATION:
; APPLICANT: Zhao, Zhihuang
; TITLE OF INVENTION: PURIFIED AND ISOLATED PROTEIN ZERO RELATED (PZR) AND
; TITLE OF INVENTION: THERAPEUTIC AND SCREENING METHODS USING SAME
; FILE REFERENCE: Attorney Docket No. US20030171565A1 1242-11/2/2
; CURRENT APPLICATION NUMBER: US/10/095,131A
; CURRENT FILING DATE: 2002-03-11
; NUMBER OF SEQ ID NOS: 49
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 20
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens

US-10-095-131A-20

Query Match 8.0%; Score 115.5; DB 14; Length 209;
Best Local Similarity 30.6%; Pred. No. 0.0e6;
Matches 38; Conservative 17; Mismatches 62; Indels 7; Gaps 4;

Qy 3 RLLAIVGAL-VSSAACGGCDEVSDSETE -AVYGMTEKILCISKRSSETNAETFTETF 59
Db 18 RWLWSVLAALGILTAGVSALEYTPKEIFVANGTQGKLT -KFKSTSTTGGLTSVNSP 76

Qy 60 RQKGTEEFVKILRYENEVLQLEEDERFEGRVWNGSRSRGTKDQLDLSIFITNVYNNHSDY 119
Db 77 QPEGADTTVFFHYSQGQVLYNPPFRDISW -- AGDLDKKDASINTENDQFHNGTY 133

Qy 120 ECHV 123
Db 134 ICDV 137

Search completed: September 21, 2004, 17:20:20
Job time : 129 secs



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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: September 21, 2004, 16:59:29 ; Search time 33 Seconds
(without alignments)
419,265 Million cell updates/sec

Title: US-09-875-456A-14
Perfect score: 1444
Sequence: 1. MGIRILALVGAALVSSACGG.....QRVVLGLPGLIIIRCVSRRGVV 268

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_AA:
1: /cgn2_6/ptodata/2/iaa/5A_COMBO_PEP:
2: /cgn2_6/ptodata/2/iaa/5B_COMBO_PEP:
3: /cgn2_6/ptodata/2/iaa/6A_COMBO_PEP:
4: /cgn2_6/ptodata/2/iaa/6B_COMBO_PEP:
5: /cgn2_6/ptodata/2/iaa/PCITS_COMBO_PEP:
6: /cgn2_6/ptodata/2/iaa/backfile1.PEP:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the core of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description
1	751	52.0	218	4	US-09-975-579-44	Sequence 44, Appl
2	258.5	17.9	159	4	US-09-975-579-22	Sequence 22, Appl
3	258.5	17.9	215	4	US-09-975-579-2	Sequence 2, Appl
4	257.5	17.8	159	4	US-09-975-579-23	Sequence 23, Appl
5	257.5	17.8	215	4	US-09-975-579-1	Sequence 1, Appl
6	115.5	8.0	209	4	US-09-430-503-20	Sequence 20, Appl
7	115.5	8.0	209	4	US-09-430-503-24	Sequence 24, Appl
8	115.5	8.0	269	4	US-09-430-503-4	Sequence 4, Appl
9	115.5	8.0	269	4	US-09-430-503-6	Sequence 6, Appl
10	115.5	8.0	269	4	US-09-430-503-8	Sequence 8, Appl
11	114.5	7.9	159	4	US-09-430-503-34	Sequence 34, Appl
12	114.5	7.9	159	4	US-09-430-503-38	Sequence 38, Appl
13	114.5	7.9	199	4	US-09-430-503-42	Sequence 46, Appl
14	114.5	7.9	199	4	US-09-430-503-46	Sequence 18, Appl
15	114.5	7.9	209	4	US-09-430-503-18	Sequence 22, Appl
16	114.5	7.9	209	4	US-09-430-503-22	Sequence 2, Appl
17	114.5	7.9	269	4	US-09-430-503-2	Sequence 36, Appl
18	112.5	7.8	159	4	US-09-430-503-36	Sequence 40, Appl
19	112.5	7.8	159	4	US-09-430-503-40	Sequence 44, Appl
20	112.5	7.8	199	4	US-09-430-503-44	Sequence 48, Appl
21	112.5	7.8	199	4	US-09-430-503-48	Sequence 26, Appl
22	107.5	7.4	270	4	US-09-430-503-26	Sequence 28, Appl
23	107.5	7.4	270	4	US-09-430-503-28	Sequence 30, Appl
24	107.5	7.4	270	4	US-09-430-503-30	Sequence 32, Appl
25	107.5	7.4	270	4	US-09-430-503-32	Sequence 9, Appl
26	98	6.8	380	3	US-08-459-933A-9	Sequence 9, Appl
27	98	6.8	380	4	US-09-393-212-9	

ALIGNMENTS

RESULT 1
US-09-975-579-44
; Sequence 44, Application US/09997579
; Patent No. 6593365
; GENERAL INFORMATION:
; APPLICANT: Cambridge University Technical Services
; TITLE OF INVENTION: A novel family of beta sub-unit proteins from a voltage gated so
; channel
; TITLE OF INVENTION: nucleic acids encoding them and therapeutic or diagnostic uses
; FILE REFERENCE: 67458-001
; CURRENT FILING DATE: 2002-04-05
; PRIORITY APPLICATION NUMBER: US/09/97579
; PRIORITY FILING DATE: 2000-02-24
; PRIORITY APPLICATION NUMBER: 60,129,473
; PRIORITY FILING DATE: 2000-02-24
; NUMBER OF SEQ ID NO: 47
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 44
; LENGTH: 218
; TYPE: PRT
; ORGANISM: Rat
US-09-975-579-44

Query Match 52.0% ; Score 751; DB 4; Length 218;
Best Local Similarity 92.9% ; Pred. No. 1.6e-72;
Matches 144; Conservative 2; MisMatches 9; Indels 0; Gaps 0;

QY 1 MGRLALVGAALVSSAGGCCVEDSETEAVYGMTPKILCISCKRSETNAETPTEWTFR 60
Db 1 MGTLALVGAIVSSAGGCCVEDSETEAVYGMTPKILCISCKRSETTAETFTETMR 60

QY 61 QKGEEFVKILRVENEVILQLEDEERGRVYNGSGRTKDLDLSIFTNTVNHSSDYE 120
Db 61 QKGEEFVKILRVENEVILQLEDEERGRVYNGSGRTKDLDLSIFTNTVNHSSDYE 120

QY 121 CHYRLIFFFENYBHTNTSVVKIHLIEVVDKGESGAA 155
Db 121 CHYRLIFFDNYBHTNTSVVKIHLIEVVDKANRDM 155

RESULT 2
US-19-975-579-22
; Sequence 22, Application US/09997579
; Patent No. 6593365
; GENERAL INFORMATION:
; APPLICANT: Cambridge University Technical Services
; TITLE OF INVENTION: A novel family of beta sub-unit proteins from a voltage gated so
; channel
; TITLE OF INVENTION: nucleic acids encoding them and therapeutic or diagnostic uses

RESULT 4

FILE REFERENCE: 674558-2001
 CURRENT APPLICATION NUMBER: US/09/997,579
 CURRENT FILING DATE: 2002-04-05
 PRIOR APPLICATION NUMBER: PCT/EP00/01783
 PRIOR FILING DATE: 2000-02-24
 PRIOR APPLICATION NUMBER: 60,129,473
 PRIOR FILING DATE: 2000-02-24
 NUMBER OF SEQ ID NCS: 47
 SOFTWARE: PatentIn version 3.1
 SEQ ID NO: 22
 LENGTH: 159
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-997-579-22

Query Match 17.9%; Score 258.5; DB 4; Length 159;
 Best Local Similarity 43.2%; Pred. No. 8.2e-20;
 Matches 64; Conservative 20; Mismatches 57; Indels 7; Gaps 4;

Qy 5 LALVVGALVSSACGGEEVDEBTEAVYGMFKILCISCRKSERNAETTENFRQGT 64
 Db 10 LASVLVWVSYCOPVCEVSETEAQGNPMKLRCKISCMKREVEATTWVFRPEGG 69

Qy 65 EEFVKILRYENVQLQEBEDERFEGRVVNGSRGTTKDLQDLSIFITNVYHSGDYECHY 124
 Db 70 KDFL-IYEVNGHQEVESP--FQGRQLWNS---KDLQDVSIITVNLNDGLYTNCVS 123

Qy 125 RLFENNVEHTSVVKHHIEVYDK-GE 151
 Db 124 RPFEEAHRFVKTTRILPLRVTEAGE 151

RESULT 3

US-09-997-579-2
 Sequence 1, Application US/09997579
 Patent No. 6593565
 GENERAL INFORMATION
 PRIOR APPLICATION NUMBER: US/09/997,579
 CURRENT APPLICATION NUMBER: 674558-2001
 NUMBER OF SEQ ID NCS: 47
 SOFTWARE: PatentIn version 3.1
 SEQ ID NO: 2
 LENGTH: 215
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-997-579-2

Query Match 17.9%; Score 258.5; DB 4; Length 215;
 Best Local Similarity 43.2%; Pred. No. 1.3e-19;
 Matches 64; Conservative 20; Mismatches 57; Indels 7; Gaps 4;

Qy 5 LALVVGALVSSACGGEEVDEBTEAVYGMFKILCISCRKSERNAETTENFRQGT 64
 Db 10 LASVLVWVSYCOPVCEVSETEAQGNPMKLRCKISCMKREVEATTWVFRPEGG 69

Qy 65 EEFVKILRYENVQLQEBEDERFEGRVVNGSRGTTKDLQDLSIFITNVYHSGDYECHY 124
 Db 70 KDFL-IYEVNGHQEVESP--FQGRQLWNS---KDLQDVSIITVNLNDGLYTNCVS 123

Qy 125 RLFENNVEHTSVVKHHIEVYDK-GE 151
 Db 124 RPFEEAHRFVKTTRILPLRVTEAGE 151

RESULT 5

US-09-997-579-1
 Sequence 1, Application US/09997579
 Patent No. 6593565
 GENERAL INFORMATION
 PRIOR APPLICATION NUMBER: 674558-2001
 CURRENT APPLICATION NUMBER: US/09/997,579
 NUMBER OF SEQ ID NCS: 47
 SOFTWARE: PatentIn version 3.1
 SEQ ID NO: 1
 LENGTH: 215
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-997-579-1

Query Match 17.9%; Score 257.5; DB 4; Length 215;
 Best Local Similarity 44.7%; Pred. No. 1.6e-19;
 Matches 59; Conservative 19; Mismatches 47; Indels 7; Gaps 4;

Qy 21 CVEVDSETEAVYGMFKILCISCRKSERNAETTENFRQGTTEFVKKILRYENEVQL 80
 Db 26 CVEVPSETEAVQGNPMKLRCKISCMKREVEATTWVFRPEGGDFL-IYEVNGHQEV 84

Qy 81 EEDERERGRVWNGSRGTTKDLQDLSIFITNVYHSGDYECHYVILFFENYEHTSVVK 140
 Db 85 ESP--FQGRQLWNS--KDLQDVSIITVNLNDGLYTNCVSREFEEFAHRPFVKTTR 139

Qy 141 KIHIEVVDK-GE 151
 Db 140 LIPRTEAGE 151

RESULT 6

US-09-997-579-1
 Sequence 1, Application US/09997579
 Patent No. 6593565
 GENERAL INFORMATION
 PRIOR APPLICATION NUMBER: 674558-2001
 CURRENT APPLICATION NUMBER: US/09/997,579
 NUMBER OF SEQ ID NCS: 47
 SOFTWARE: PatentIn version 3.1
 SEQ ID NO: 1
 LENGTH: 215
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-997-579-1

Query Match 17.9%; Score 257.5; DB 4; Length 215;
 Best Local Similarity 44.7%; Pred. No. 1.6e-19;
 Matches 59; Conservative 19; Mismatches 47; Indels 7; Gaps 4;

Qy 21 CVEVDSETEAVYGMFKILCISCRKSERNAETTENFRQGTTEFVKKILRYENEVQL 80
 Db 26 CVEVPSETEAVQGNPMKLRCKISCMKREVEATTWVFRPEGGDFL-IYEVNGHQEV 84

Qy 81 EEDERFEGRVWNGSRGTFKQDLSIFITNTVNHSGDYECHYRLLUFFENYENTSVVK 140
 Db 85 ESP-FOGLQNGS--KDLQVSVTLYNLNDSSLYTCNVSRREEFEHRPFYKTR 139

Qy 141 KIHTEVDK-GE 151
 Db 140 LIPLRVTBEEAGE 151

RESULT 6
 US-09-430-503-20
 ; Sequence 20, Application US/09430503
 ; Patent No. 6355786
 ; GENERAL INFORMATION:
 ; APPLICANT: Zhao, Zhihuang
 ; TITLE OF INVENTION: PURIFIED AND ISOLATED PROTEIN ZERO RELATED (PZR) AND
 ; TITLE OF INVENTION: THERAPEUTIC AND SCREENING METHODS USING SAME
 ; FILE REFERENCE: Attorney Docket No. 6355786 1242-11/2
 ; CURRENT APPLICATION NUMBER: US/09/430,503
 ; CURRENT FILING DATE: 1999-10-29
 ; NUMBER OF SEQ ID NOS: 49
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO: 20
 ; LENGTH: 209
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-430-503-20

Query Match 8.0%; Score 115.5; DB 4; Length 209;
 Best Local Similarity 30.6%; Prd. No. 0.00028; Indels 7; Gaps 4;
 Matches 38; Conservative 17; Mismatches 62; Indels 7; Gaps 4;

Qy 3 RLLALVGAAL-VSSACGGCVEVDSETE--AVYGMTPKILCISCKRSETNAETTEWT 59
 Db 18 RWLWSVLAALGILTAGVSALLEVTPKEFVANGTQGLTC-KFKSTSTGGLTSSVNSP 76

Qy 60 RQKGTEEFVKILRYENEVQLLEDERFGRVWNGSGTQDLSIFITNTVNHSGDY 119
 Db 77 QPEGADTTVSSFHYSQGQVYLNYPFPKDRISW--AGDLDKDASINENMQFTNGTY 133

Qy 120 ECHV 123
 Db 134 ICDV 137

RESULT 7
 US-09-430-503-24
 ; Sequence 24, Application US/09430503
 ; Patent No. 6355786
 ; GENERAL INFORMATION:
 ; APPLICANT: Zhao, Zhihuang
 ; TITLE OF INVENTION: PURIFIED AND ISOLATED PROTEIN ZERO RELATED (PZR) AND
 ; TITLE OF INVENTION: THERAPEUTIC AND SCREENING METHODS USING SAME
 ; FILE REFERENCE: Attorney Docket No. 6355786 1242-11/2
 ; CURRENT APPLICATION NUMBER: US/09/430,503
 ; CURRENT FILING DATE: 1999-10-29
 ; NUMBER OF SEQ ID NOS: 49
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO: 24
 ; LENGTH: 209
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-430-503-24

Query Match 8.0%; Score 115.5; DB 4; Length 209;
 Best Local Similarity 30.6%; Prd. No. 0.00028; Indels 7; Gaps 4;
 Matches 38; Conservative 17; Mismatches 62; Indels 7; Gaps 4;

Qy 3 RLLALVGAAL-VSSACGGCVEVDSETE--AVYGMTPKILCISCKRSETNAETTEWT 59
 Db 18 RWLWSVLAALGILTAGVSALLEVTPKEFVANGTQGLTC-KFKSTSTGGLTSSVNSP 76

Qy 60 RQKGTEEFVKILRYENEVQLLEDERFGRVWNGSGTQDLSIFITNTVNHSGDY 119

Db 77 QPEGADTVSFFHYSQGVYLGNYPFPKDRISW--AGDLRKDASINENMQFIHNGTY 133 Qy 120 ECHV 123
 Qy 120 ECHV 123
 Qy 134 ICDV 137
 Db 134 ICDV 137

RESULT 10
 US-09-430-503-8
 ; Sequence 8, Application US/09430503
 ; Patent No. 6355786
 ; GENERAL INFORMATION:
 ; APPLICANT: Zhao, Zhihuang
 ; TITLE OF INVENTION: PURIFIED AND ISOLATED PROTEIN ZERO RELATED (PZR) AND
 ; TITLE OF INVENTION: THERAPEUTIC AND SCREENING METHODS USING SAME
 ; FILE REFERENCE: Attorney Docket No. 6355786 1242-11/2
 ; CURRENT APPLICATION NUMBER: US/09/430,503
 ; CURRENT FILING DATE: 1999-10-29
 ; NUMBER OF SEQ ID NOS: 49
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO: 8
 ; LENGTH: 269
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-430-503-8

Query Match 8.0% Score 115.5; DB 4; Length 269;
 Best Local Similarity 30.6%; Pred. No. 0.0004;
 Matches 38; Conservative 17; Indels 62; Gaps 4;
 Qy 3 RILALVVAAL-VSSACCVCVYDSETE-AYVGMFVKILCISCKRSETNAETFTWTF 59
 Db 18 RWLWSVLAALGILTAGSYALEVYTFKILYENEVQLQEBDERFGRVWNGSRGTXDQLDISIFTINVTYHSGDY 76
 Qy 60 RQKGTEEFVKILYENEVQLQEBDERFGRVWNGSRGTXDQLDISIFTINVTYHSGDY 119
 Db 77 QPEGADTVSFFHYSQGVYLGNYPFPKDRISW--AGDLRKDASINENMQFIHNGTY 133
 Qy 120 ECHV 123
 Db 134 ICDV 137

RESULT 11
 US-09-430-503-34
 ; Sequence 34, Application US/09430503
 ; Patent No. 6355786
 ; GENERAL INFORMATION:
 ; APPLICANT: Zhao, Zhihuang
 ; TITLE OF INVENTION: PURIFIED AND ISOLATED PROTEIN ZERO RELATED (PZR) AND
 ; TITLE OF INVENTION: THERAPEUTIC AND SCREENING METHODS USING SAME
 ; FILE REFERENCE: Attorney Docket No. 6355786 1242-11/2
 ; CURRENT APPLICATION NUMBER: US/09/430,503
 ; CURRENT FILING DATE: 1999-10-29
 ; NUMBER OF SEQ ID NOS: 49
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO: 34
 ; LENGTH: 159
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-430-503-34

Query Match 7.9% Score 114.5; DB 4; Length 159;
 Best Local Similarity 30.6%; Pred. No. 0.00024;
 Matches 38; Conservative 15; Indels 64; Gaps 4;
 Qy 3 RILALVVAALVSSACG-GCVERDSETE-AYVGMFVKILCISCKRSETNAETFTWTF 59
 Db 18 RWLWSVLAALGILTAGSYALEVYTFKILYENEVQLQEBDERFGRVWNGSRGTXDQLDISIFTINVTYHSGDY 76
 Qy 60 RQKGTEEFVKILYENEVQLQEBDERFGRVWNGSRGTXDQLDISIFTINVTYHSGDY 119
 Db 77 QPEGADTVSFFHYSQGVYLGNYPFPKDRISW--AGDLRKDASINENMQFIHNGTY 133

RESULT 14
US-09-430-503-46
Qy 120 ECHV 123
Db 134 ICDV 137

Search completed: September 21, 2004, 17:16:54
Job time : 34 secs

; Sequence 46, Application US/09430503
; GENERAL INFORMATION:
; APPLICANT: Zhao, Zhizhuang
; TITLE OF INVENTION: PURIFIED AND ISOLATED PROTEIN ZERO RELATED (PZR) AND
; TITLE OF INVENTION: THERAPEUTIC AND SCREENING METHODS USING SAME
; FILE REFERENCE: Attorney Docket No. 6355786 1242-11/2
; CURRENT APPLICATION NUMBER: US/09/430,503
; CURRENT FILING DATE: 1999-10-29
; NUMBER OF SEQ ID NOS: 49
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 46
; LENGTH: 199
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-430-503-46

Query Match 7.9%; Score 114.5; DB 4; Length 199;
Best Local Similarity 30.6%; Pred. No. 0.0003;
Matches 38; Conservative 15; Mismatches 64; Indels 7; Gaps 4;
Query 3 RLLALVVAALVSSACG-GCVDSEEE-AVYGMFTKILCSCRSENAETFWTF 59
Db 18 RWLWSVLAALGILTGSALLEVTPREIFIVANGTQGKLTC-KFKSTSTTGGLTSVWSWP 76
Query 60 RQKGTEEVFKILRYENEVYLQLEEDERREGRVWNGSSGTTQDLSIFITVTVYHSGDY 119
Db 77 QPEGADTTVSPHYSQQVYLGNYPPKDRISW--AGDLDKKDASINNIENMQFHNQTY 133
Query 120 ECHV 123
Db 134 ICDV 137

RESULT 15

US-09-430-503-18
Qy 120 ECHV 123
Db 134 ICDV 137

; Sequence 18, Application US/09430503
; Patent No. 6355786
; GENERAL INFORMATION:
; APPLICANT: Zhao, Zhizhuang
; TITLE OF INVENTION: PURIFIED AND ISOLATED PROTEIN ZERO RELATED (PZR) AND
; TITLE OF INVENTION: THERAPEUTIC AND SCREENING METHODS USING SAME
; FILE REFERENCE: Attorney Docket No. 6355786 1242-11/2
; CURRENT APPLICATION NUMBER: US/09/430,503
; CURRENT FILING DATE: 1999-10-29
; NUMBER OF SEQ ID NOS: 49
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 18
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-430-503-18

Query Match 7.9%; Score 114.5; DB 4; Length 209;
Best Local Similarity 30.6%; Pred. No. 0.0003;
Matches 38; Conservative 15; Mismatches 64; Indels 7; Gaps 4;
Query 3 RLLALVVAALVSSACG-GCVDSEEE-AVYGMFTKILCSCRSENAETFWTF 59
Db 18 RWLWSVLAALGILTGSALLEVTPREIFIVANGTQGKLTC-KFKSTSTTGGLTSVWSWP 76
Query 60 RQKGTEEVFKILRYENEVYLQLEEDERREGRVWNGSSGTTQDLSIFITVTVYHSGDY 119
Db 77 QPEGADTTVSPHYSQQVYLGNYPPKDRISW--AGDLDKKDASINNIENMQFHNQTY 133
Query 120 ECHV 123

